SPECIFICATION

The present application claims the priority of a co-pending Provisional Application, Serial No. 60/430,186, filed on December 2, 2002.

Background

I. Technical Fields

The Technical fields in which the claimed invention has been developed are telephony, computer technology, and touch screen technology.

II. Related Art

1. Computers, hand-held devices, and other electronic devices present readable text as a standard and universal given. The capability for selecting a feature, including text, on the screen of such devices is effectuated through a mouse-and-cursor or keyboard functions.

Related Art Limitations: Computer and Internet accessibility have not displaced the interest of individuals to reach recorded information or live attendants via telephone, wired or wireless, or other electronic devices, including the computer itself, to obtain information that is either not available on-screen, cannot be found on-screen by the individual in question, or is being sought by an individual reliant on telephonic connectivity for any reason. Also, while many companies, institutions, and agencies have option trees in text form on their

Websites, the outgoing message option trees they maintain on their telephone systems are time-consuming and aggravating to callers. According to the Inventor's records, a caller's working through a voice outgoing message tree at a large may spend as much as 2 to 4 minutes before reaching a desired end-point, whereas a caller working through text options on a computer screen can finish a comparable number of options in a matter of seconds. Even if all Websites would enable such access in the future, the problem with extant and future voice-only telephone outgoing message option trees would remain.

2. Voice-to-text technology, including TDD, enables the near-simultaneous transcription of spoken messages, as is commonly done with TV newscasts, interviews, and other programs in which the words spoken are virtually immediately followed by running text transcriptions on the device's screen.

Related Art Limitations: While this technology may seem comparable at first glance, it is not in fact. The flow of the transcription runs no faster than the speed of the spoken voice, while the supplying of the written information to the caller under the claimed invention is virtually instantaneous, creating a valuable benefit in time-saving. Furthermore, a business, agency, or other entity interested in providing a written message tree of its own would not be as interested in a verbatim transcription of its OM's full narrative sentences, which Voice-to-Text achieves. It would more likely be interested in written text more concisely tailored to keywords, thus supporting the Invention's innovative provision of rapid options. Also, the entity composing the outgoing message would not likely wish to be reliant on a voice-to-text program at the caller's end to accurately translate its message.

3. Touch-screen Technology allows the user to select options posted on the screen of a computer or other device by touching the appropriate site on the screen and thereby advancing to the next set of options or to the sequence's endpoint. Extant touch-screen technology is capable of providing the devices and software for the Inventor's Rapid Outgoing Message Readout System Touch Screen Device (ROMROS-TD), though one or more innovations may be introduced and claimed as dependent inventions by the Inventor as the ROMROS-TD prototype is developed.

Related Art Limitations: Personal computers, network workstations, laptops, and similar computer devices do not employ touch screen technology. The user of such a computer/device can, however, interact with information displayed on the screen by selecting and clicking, as described below. The innovative introduction of a textual outgoing message tree at the called party's end would take advantage of Touch-screen capabilities.

4. Select-and-Click functions, whether by keyboard or mouse, common to all computers, wireless phones, hand-held devices, and other devices are also applicable to the Inventor's claimed process.

Related Art Limitations: There are few limitations at the user's or caller's end to utilize the claimed invention. The innovative introduction of a textual outgoing message tree at the called party's end would take advantage of Select-and-Click (e.g., keyboard or mouse) capabilities where the caller works through a non-Touch-screen device.

5. Caller ID displays present CLASS information related to the caller's identification, displaying number and caller name data carried by Caller ID or CLID channels.

Related Art Limitations: Caller ID data are limited to the caller's phone number and name wording. Because of the nature and function of this CLASS data transmission, written text of an outgoing message tree cannot be transmitted via the channels used for Caller ID data.

6. Summary of Related Art Limitations: These include the non-existence of processes and supportive applications that (a) interconnect a written text display provided in the outgoing message tree of a telephone-called entity with a display screen operated by a telephonic caller (utilizing a wired telephone, wireless telephone, computer, or other device interacting with the called party at its telephone interface) and (b) provide real-time interconnectivity and interaction between caller and called party.

III. Summary of the Invention

The Rapid Outgoing Message Read-out System (ROMROS) is a process or method with applications, including hardware and software, by which individuals placing calls, by telephone or any electronic device, to a party with a multi-option Outgoing Message, can peruse and interact with OM text readouts on a touch-screen or other device, rather than listen and respond to often time-consuming audio-voice options, thereby accessing the desired information, live attendant, or other end-use more rapidly than can be achieved through audio-voice options trees. The invention subsets include applications for **a)** recording, managing, and transmitting in text form the called party's Outgoing Messages and other displays and materials to phone callers and electronic inquirers; **b)** receiving, displaying, managing, and interacting with incoming textual Outgoing Messages on any touch-screen, computer, other terminal equipment, wireless phones, or any other communications device; and **c)** the touch-screen display device, provisionally termed ROMROS-TD, that the applicant has invented for direct connection to a telephone, wired or wireless, as an alternative to employing the ROMROS on a computer or other non-telephonic device that can utilize it.

IV. Description of the Drawings

FIG. 1 is a flow-chart describing my new process;

FIG. 2 is a perspective view of my ROMROS display device, which utilizes the process.

V. Detailed Description of the Invention

The claimed Invention consists of the following:

1. Development of software and mechanisms to enable the creation and installation in the outgoing message unit of an entity's PBX of Readable-Text Outgoing Messages (RTOM) text that will be transmitted to a caller, through either analog or digital service, in lieu of the standard vocalized outgoing message tree when an authorizing signal is detected by the PBX on the caller's line;
2. This authorizing signal will be embedded at the caller's telephonic device in software the inventor will develop for the caller's end. It will be transmitted, under existing technology, on a B channel or other suitable channel, whenever the caller uses the enabled phone or other telephonic device. If the caller's signal activates a RTOM unit in a called party's PBX, if this is the initial interface selected by the called party, as it frequently is in a large company or government agency, the RTOM text message will be sent back via the B channel, or other channel under new technology, to reach the caller's display device, whether the Inventor's ROMROS or another programmed telephonic or computer device is utilized;
3. The received RTOM text message data will arrive, via interface, at the caller's modem, CSU, DSU, or other data communication equipment